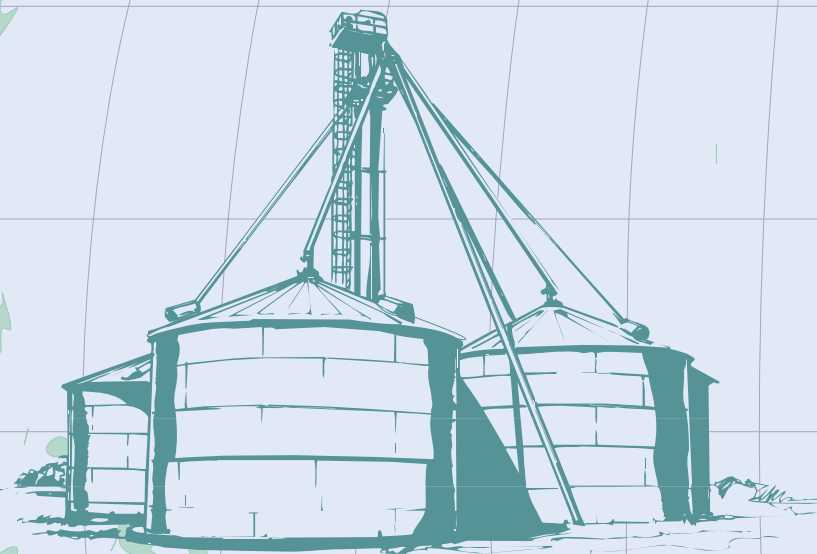


# Distribution Manual

How to Handle Bulk Shipments of U.S. and Canadian-Grown  
Non-Genetically Modified Agricultural Products (Soybeans and Corn)



◆ Inquiries concerning this pamphlet and other related matters should be directed to the following.

## **Food Industry Promotion Division**

General Food Policy Bureau  
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES  
1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8950, Japan  
Tel: 03-3502-8111 ext. 3212

## **Planning and Research Department**

JAPAN FOOD INDUSTRY CENTER  
7th Fl. Sankaido Bldg., 1-9-13 Akasaka, Minato-ku, Tokyo 107-0052, Japan  
Tel: 03-3224-2372  
Fax: 03-3224-2398

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# New System of Labeling Genetically Modified Foods

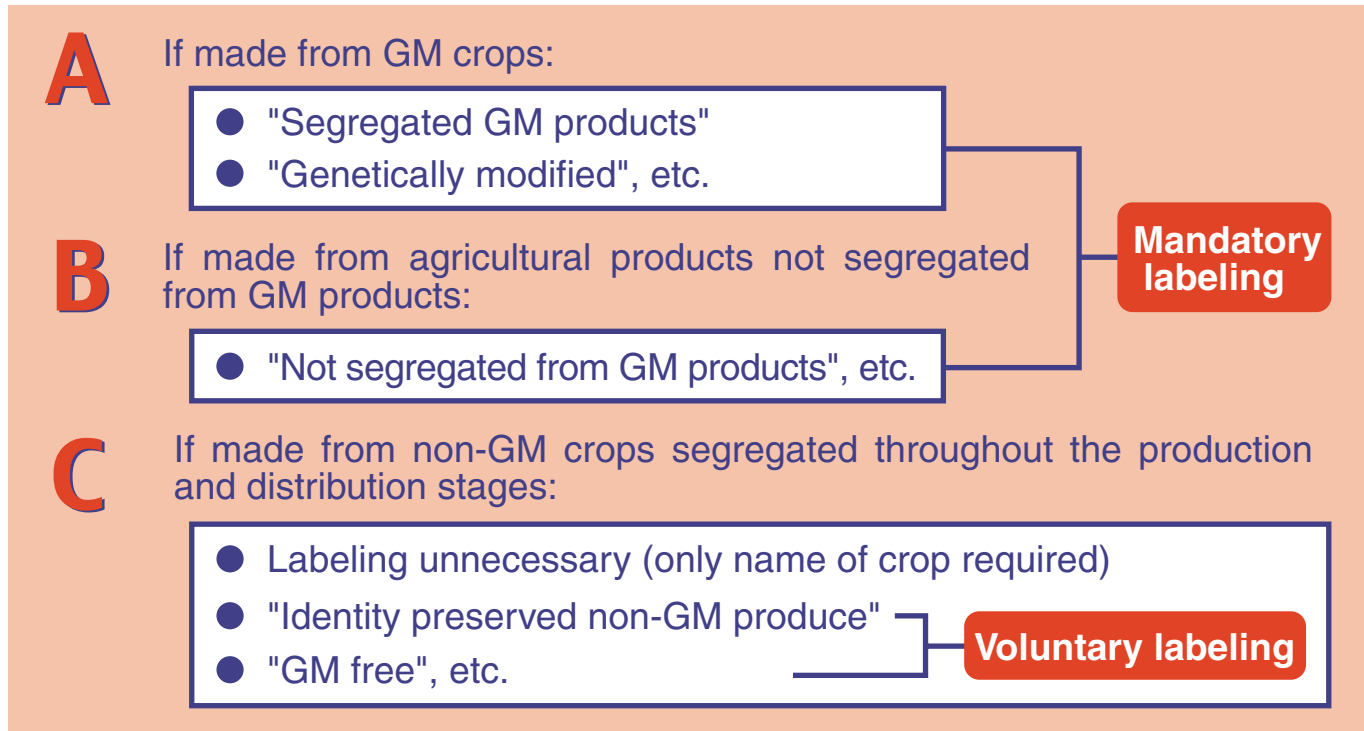
*Identity preserved handling is necessary in order to label products as "identity preserved non-GM product".*

*Labeling of genetically modified foods in accordance with the Japanese Agricultural Standards (JAS) Law began in April 1, 2001. (Table 1)*

- Labeling standards require that, as well as agricultural products (soybeans, corn, potatoes, rapeseed and cottonseed), processed foods that contain genetically modified DNA or protein even after processing must also be labeled.
  - The processed foods made from soybeans or corn shown in Table 2 must be labeled "genetically modified" or "not segregated from GM produce".
- Non-GM agricultural products that are identity preserved and processed foods made from such products do not have to be labeled, but may be voluntarily labeled "identity preserved non-GM produce" or "GM free", etc.
  - GM high oleic acid soybeans and processed foods must be labeled "GM high oleic acid" from January 1, 2002.

**Table 1** Labeling system

- (1) Produce whose composition or nutritive value, etc. is markedly different from that of conventional produce (high oleic acid soybeans)
- **Mandatory labeling** as "soybeans (GM high oleic acid)"
- (2) Produce whose composition and nutritive value, etc. are similar to that of conventional produce
- ① Processed foods containing genetically modified DNA or protein even after processing (Table 2)

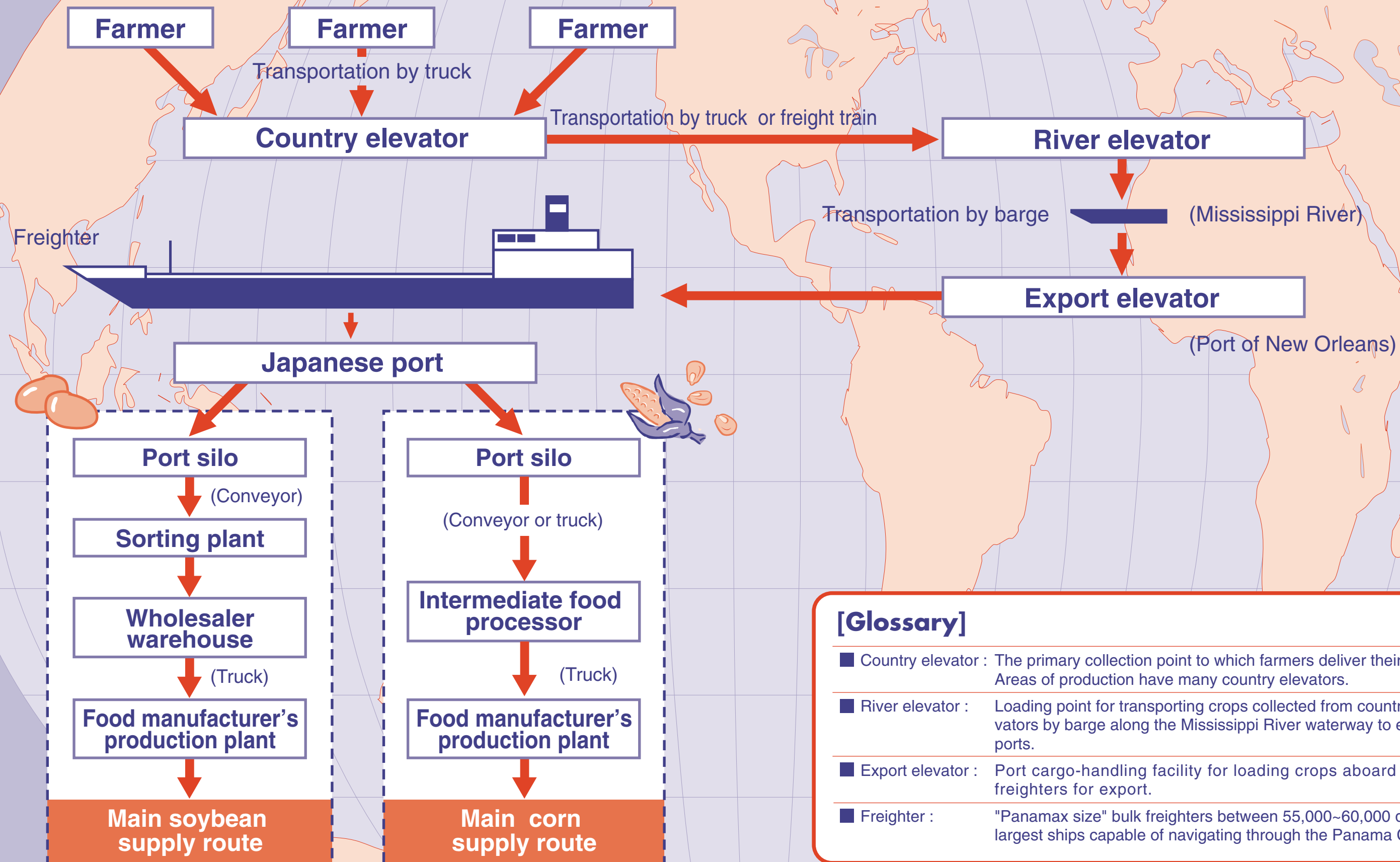


**Table 2** Processed foods made from soybeans or corn covered by new labeling system

	Food	Crops covered
1	Tofu, abura-age (deep-fried bean curd)	Soybeans
2	Kôri-tôfu (dried bean curd), okara (bean curd lees), yuba (dried soybean casein)	Soybeans
3	Nattô (fermented soybeans)	Soybeans
4	Soya milk	Soybeans
5	Miso	Soybeans
6	Boiled soybeans	Soybeans
7	Canned and bottled soybeans	Soybeans
8	Kinako (roasted soybean flour)	Soybeans
9	Roasted soybeans	Soybeans
10	Food made principally from any ingredient covered by categories 1 to 9	Soybeans
11	Food made principally from soybeans (for cooking)	Soybeans
12	Food made principally from soybean flour	Soybeans
13	Food made principally from soybean protein	Soybeans
14	Food made principally from green soybeans Green	Green Soybeans
15	Food made principally from soybean sprouts	Soybean sprouts
16	Corn snacks	Corn
17	Cornstarch	Corn
18	Popcorn	Corn
19	Frozen corn	Corn
20	Canned and bottled corn	Corn
21	Food made principally from corn flour	Corn
22	Food made principally from corn grits (except corn flakes)	Corn
23	Food made principally from (eating) corn	Corn
24	Food made principally from any ingredient covered by categories 16 to 20	Corn

Notes: A food is "made principally from" an ingredient if that ingredient is one of the three main ingredients in terms of weight and in addition comprises at least 5% of the total weight of the ingredients used. The foods covered are those listed above, but as a considerable number of processed foods fall into categories 10, 11, 12, 13, 14, 15, 21, 22, 23 and 24, care is required in determining whether or not a product is covered by labeling requirements.

# Normal methods of distribution of soybeans and corn in the U.S. and Japan



## [Glossary]

- **Country elevator** : The primary collection point to which farmers deliver their crops. Areas of production have many country elevators.
- **River elevator** : Loading point for transporting crops collected from country elevators by barge along the Mississippi River waterway to export ports.
- **Export elevator** : Port cargo-handling facility for loading crops aboard large freighters for export.
- **Freighter** : "Panamax size" bulk freighters between 55,000~60,000 dwt, the largest ships capable of navigating through the Panama Canal.

# Identity Preserved Handling

## What is identity preserved handling?

Identity preserved handling means the handling of non-GM agricultural products at every stage of production and distribution—from farms to food manufacturers—so as to avoid commingling with GM agricultural products, and the certification by means of documentary evidence that products have been handled in this way.

■ **The quality labeling standards concerning genetically modified products define identity preserved (IP) handling as follows.**

The segregated handling of GM agricultural products and non-GM agricultural products with due care of a good manager at each stage of production, distribution and processing, and the certification of such by means of documentary evidence.

## Bulk transport manual

This distribution manual relates to the bulk transportation of soybeans and corn, and is designed to ensure supplies of identity preserved, non-GM ingredients.

Soybeans and corn imported from countries outside North America where soybeans and corn are transported in bulk and genetically modified varieties of such products are cultivated on a commercial basis must also require IP handling in accordance with this manual.

## Compartmentalized distribution of soybeans and corn by container, etc.

With regard to transport by container (bagged or in bulk), as in the case of some soybeans for making miso and tofu and small soybeans for nattô, organic soybeans, and corn for popcorn, this manual applies up until the point when containers are sealed and from when containers are opened again.

## Unintentional commingling

Non-GM agricultural products confirmed to have been properly identity preserved handled may still contain some GM products that have unintentionally become commingled.

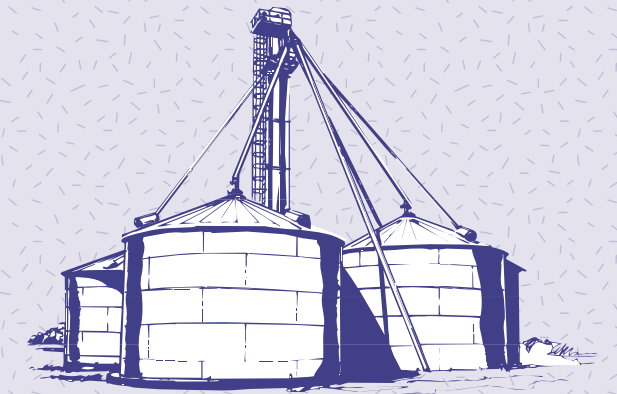
Given the current state of IP handling, therefore, the maximum level for commingling of GM and non-GM agricultural products are set at 5%.

Agricultural products that have not been confirmed to have been identity preserved handled and agricultural products into which GM products have been intentionally mixed are not treated as having been identity preserved even where the mixture rate does not exceed 5%.



# Distribution Manual Outline

This manual provides guidelines concerning effective means of handling product, handlers, records, corroborators and certificates at the check point where commingling may occur on each stage of production and distribution of product to ensure social verification of the non-GM product.



## Handlers and corroborators

Handlers are entities that handle product in such a way as to preserve the identity of loading at each stage from farms to manufacturers. Corroborators are entities that confirm and certify that loading are identity preserved. Handlers may in some cases also be corroborators.

## Certification

Corroborators at each stage from farms to manufacturers issue certificates confirming that product was identity preserved by handlers. Issuers of certificates at each stage (with the exception of importers) attach copies of the certificates for each previous stage along with their own certificates to send to the certificate issuer for the next stage. Instead of copies of the above certificates, importers issue a certificate covering all stages of handling overseas.

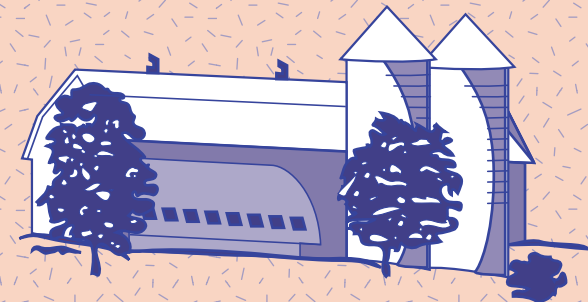
## Records and other documents

Handlers at each stage must keep records and other documents detailing their handling of product in order to guarantee and confirm the accuracy of certificates. Due to the potentially vast volume of such records and documents, however, corroborators need not store or attach all records and documents for each previous stage.

## Storage period

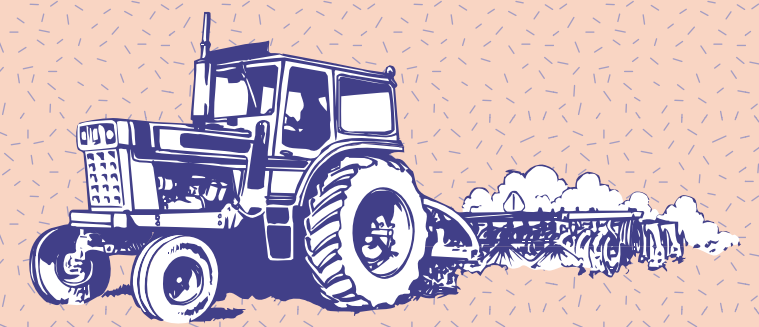
Certificates, records and other documents for each stage must be kept for a minimum of two years.

Product must be handled as follows at each stage of production through to manufacturing, and records and other documents kept to certify how product was handled.



## Guidelines for identity preserved handling of non-GM crops

Stage of production/distribution	Points to check	Method of handling	Handlers	Records	Corroborators
<b>Farm production Stage</b> <b>A</b>	<b>1</b> Sowing	Check based on seed certificates or seed names/ numbers.	Farmers or originators such as country elevators in a position to supervise farmers	<ul style="list-style-type: none"> <li>Seed name (number)</li> <li>Quantity shipped</li> <li>Date of shipment</li> <li>Collection (seed name/number of crop, farmer purchased from, quantity, date)</li> <li>Storage (name of article, bin number unless used exclusively for non-GM product, quantity, date)</li> <li>Entry and discharge from storage (seed name, bin number if not used exclusively for non-GM product, quantity, date)</li> <li>Confirmation of cleaning if not used exclusively for non-GM product</li> </ul>	The originator checks the records to confirm that the handler handled the product properly in the manner shown to the left.
	<b>2</b> Harvest	Harvest so that non-GM crops are not mixed with other crops.			
	<b>3</b> Agricultural tools and equipment	Use agricultural tools and equipment, such as seeders and harvesters, only for non-GM crops or clean if used for other crops as well.			
<b>Country elevator distribution stage</b> <b>B</b>	<b>4</b> Vehicles, etc. used in shipment, collection and transportation	Vehicles should preferably be used only for non-GM crops. Where this is not possible, they should be cleaned beforehand.			
	<b>5</b> Storage facilities and conveying equipment	Use storage facilities (e.g. silos) and conveying equipment exclusively for non-GM product. If staggered use is made of storage facilities and conveying equipment or if not otherwise used exclusively for non-GM product, they should be cleaned before use.			
<b>River elevator distribution stage</b> <b>C</b>	<b>1</b> Trucks, freight trains and barges for collection and transportation	Trucks should preferably be used only for non-GM product. Trucks, freight trains and barges not used only for non-GM product should be cleaned beforehand.	River elevators	<ul style="list-style-type: none"> <li>Collection (seed name/number of crop, farmer purchased from, quantity, date)</li> <li>Storage (name of article, bin number unless used exclusively for non-GM product, quantity, date)</li> <li>Entry and discharge from storage (seed name, bin number if not used exclusively for non-GM product, quantity, date)</li> <li>Confirmation of cleaning</li> </ul>	The originators or importer, etc. checks the records to confirm that the handler handled the product properly in the manner shown to the left.
	<b>2</b> Storage facilities and conveying equipment	Storage facilities and conveying equipment should be used only for non-GM product. Such facilities not used exclusively for non-GM product should be cleaned beforehand.			
<b>Export elevator and transport stage to Japan</b> <b>D</b>	<b>1</b> Storage facilities and facilities for loading aboard mother ship	Pre-clean storage facilities and conveying equipment not used exclusively for non-GM product.	Export elevators, port silo managers or other parties given responsibility for handling product	<ul style="list-style-type: none"> <li>Arrival of goods</li> <li>Entry and discharge from storage</li> <li>Import/export (name of article, quantity, mother ship, hatch number, date, ports of origin/entry)</li> <li>Confirmation of cleaning</li> </ul>	The importer checks the records to confirm that the handler handled the product properly in the manner shown to the left.
	<b>2</b> Loading into hold	Due care should be taken when sorting and moving different varieties or product in the same hold to ensure non-GM and GM products do not become commingled.			
	<b>3</b> Loading from mother ship onto coaster or barge	Pre-clean barges and conveying equipment not used exclusively for non-GM product.			



## Guidelines for identity preserved handling of non-GM crops

Stage of production/distribution	Points to check	Method of handling	Handlers	Records	Corroborators
<b>Port silo stage in Japan</b>	① Silo bins, bucket elevators, weighing equipment, conveyors and other equipment used in conveying product to and from silos	Pre-clean port silos and equipment not used exclusively for non-GM product.	Warehouse companies, sorters, etc.	<ul style="list-style-type: none"> <li>● Arrival of goods</li> <li>● Entry and discharge from storage</li> <li>● Confirmation of cleaning</li> </ul>	The consignor (wholesaler, manufacturer, importer, etc.) checks the records to confirm that the product was handled properly in the manner shown to the left.
	② Sorting (bucket elevators, raw material tanks, product tanks, stone removers, true specific gravity sorters, etc.)	Pre-clean sorting equipment not used exclusively for non-GM product.			
<b>Wholesaler distribution stage (mainly soybeans)</b>	① Conveyance to and from silos	Pre-clean storage facilities, trucks, sorting equipment, etc. not used exclusively for non-GM product.	Wholesalers	<ul style="list-style-type: none"> <li>● Purchase of ingredients</li> <li>● Storage of ingredients</li> <li>● Entry and discharge from individual storage locations</li> <li>● Sale of products</li> <li>● Bagging (name of article, quantity, type of packing, date)</li> <li>● Confirmation of cleaning</li> </ul>	The wholesaler checks the records to confirm that the product was handled properly in the manner shown to the left.
	② Transportation if transported in bulk				
	③ Sorting (bucket elevators, gravity separators, rough sorters, stone removers, true specific gravity sorters, and other sorting and bagging equipment)				
<b>Processor (grits starch processing plant) distribution stage</b>	① Conveyance of ingredients	Dry run conveying equipment before use to confirm no residues remain.	Grits starch manufacturers	<ul style="list-style-type: none"> <li>● Purchase of ingredients</li> <li>● Receipt and payment for ingredients</li> <li>● Production</li> <li>● Storage location</li> <li>● Entry and discharge from warehouse of product</li> <li>● Delivery</li> <li>● Confirmation of cleaning</li> </ul>	Grits starch processor checks the records to confirm that the product was handled properly in the manner shown to the left.
	② Sorting facilities	Dry run sorting equipment before use to confirm no residues remain.			
	③ Grits starch production line	Where ingredients normally used have not been segregated, confirm no residues remain in manufacturing facilities. If there is a risk that there may be powder or liquid residues, clean the facilities in question.			
	④ Grits starch storage and shipment	Store segregated and non-segregated ingredients in separate locations in product warehouses.			
<b>Food manufacturer distribution stage</b>	① Conveyance of ingredients	Check certificates to confirm that product is non-GM.	Food manufacturers	<ul style="list-style-type: none"> <li>● Purchase of raw materials (source of purchase, quantity)</li> <li>● Production</li> <li>● Storage</li> <li>● Shipment</li> <li>● Confirmation of cleaning</li> </ul>	Food manufacturer checks the records to confirm that the product was handled properly in the manner shown to the left.
	② Segregated storage of ingredients	Store clearly separated from unsegregated ingredients.			
	③ Production line	Pre-clean production line facilities not used exclusively for non-GM product.			

# Issuance and storage of certificates

**Certification is required to confirm that the identity of product is preserved at each stage of distribution.**

The companies (handlers) or corroborators involved in identity preserved handling of non-GM crops at each stage of distribution issue the next party in the distribution chain with certification giving the article name, place of origin, crop year and quantity, etc. of shipments.

Where the recipient of certification sells non-GM crops received from one party to another party, certification must be accompanied by copies of certificates received from the previous party as evidence of identity preservation.

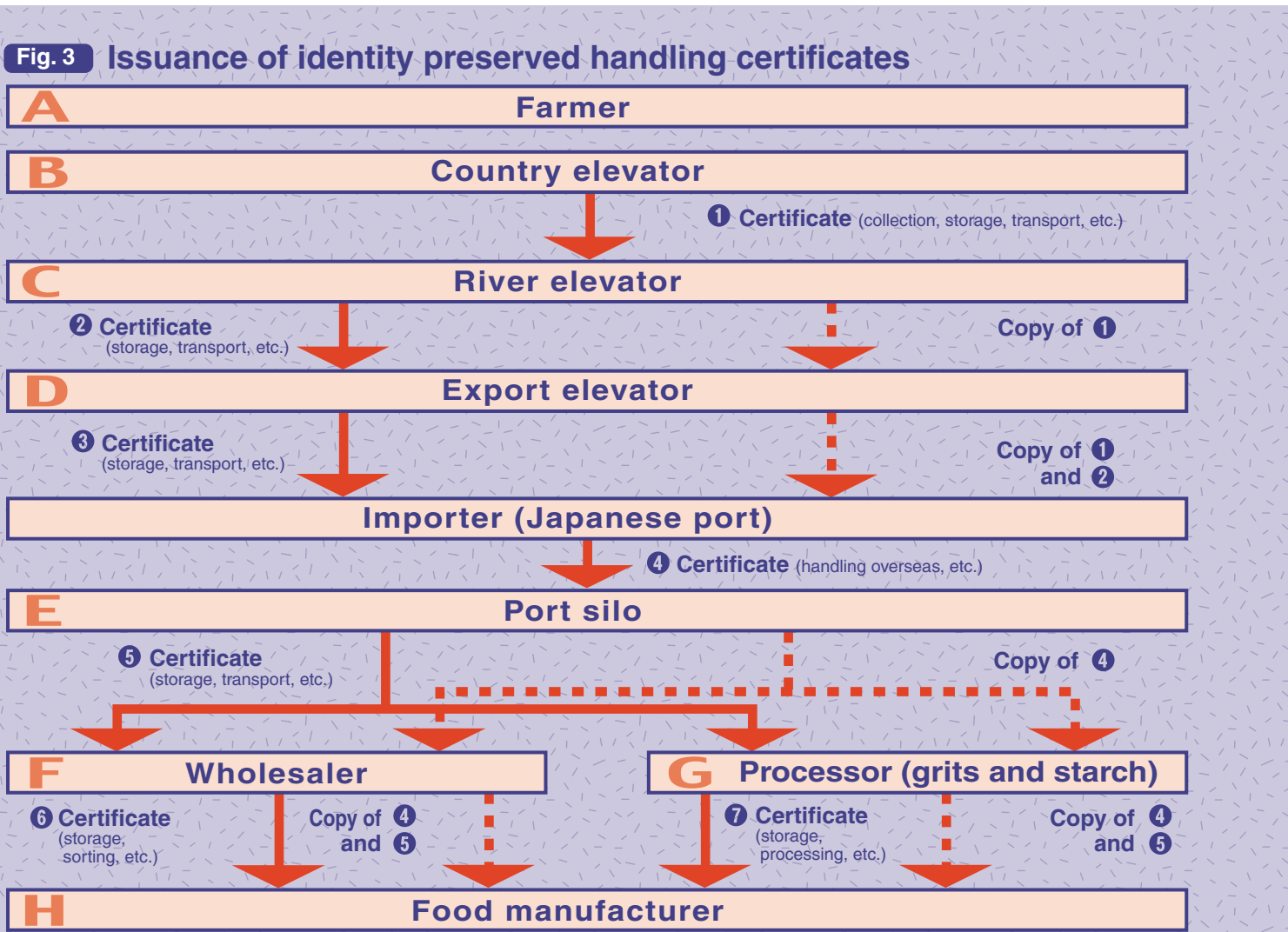
## Within Japan, certification from the importer goes as far as the food Manufacturers.

An importer selling non-GM product to a wholesaler or manufacturer issues the wholesaler or manufacturer with a certificate detailing how the product was handled before reaching Japan. When a wholesaler sells to a food manufacturer through a secondary wholesaler, the secondary wholesaler issues identity preserved certification accompanied by a copy of certification from the importer.

## Relevant documents must be kept at least two years

Certificates are issued to the next party in the chain of distribution by corroborators based on records and other documents detailing the handling of product by the handlers at each stage of distribution. These certificates, records and other relevant documents must therefore be kept for a minimum of two years.

Fig. 3 shows a typical example of the issuing of certificates in a typical distribution route from farmer to food manufacturer.



## Example of certificate issued by importer

To XXX	<b>Certificate</b>	mm dd, yy XX Co., Ltd.
(1) Name of article	(5) Foreign port (loading)	
(2) Place of origin	(6) Japanese port (unloading)	
(3) Year of crop	(7) Name of vessel and hold number	
(4) Quantity	(8) Arrival date	
This is to certify that the above shipment is a shipment of non-genetically modified farm product collected, stored and transported to avoid commingling with genetically-modified product.		
<b>Note:</b> We have done our best to handle the above product under strictly controlled conditions in order to preserve its identity. Even where shipments are identity preserved, however, it is inherently impossible to entirely prevent commingling, and so we cannot guarantee that the product is 100% non-genetically modified.		

## Example of certificate issued by grits starch maker

To XXX	<b>Certificate</b>	mm dd, yy XX Co., Ltd.
(1) Name of article		
(2) Lot number		
(3) Quantity		
This is to certify that the above products were made from certified ingredients (copies of certification attached) which were sorted, manufactured, [bagged] and transported by us to avoid commingling with other crops.		

## Example of certificate issued by wholesaler in Japan

To XXX	<b>Certificate</b>	mm dd, yy XX Co., Ltd.
(1) Name of article		
(2) Place of origin		
(3) Year of crop		
(4) Quantity		
This is to certify that the above goods consist of certified farm product (copies of certification attached) which was selected, bagged and stored by us to avoid commingling with other farm product.		